



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/554,103

10/21/2005

Haruo Ohta

2005\_1652A

6590

52349 7590 03/18/2008  
WENDEROTH, LIND & PONACK L.L.P.  
2033 K. STREET, NW  
SUITE 800  
WASHINGTON, DC 20006

EXAMINER

BUI, HUNG S

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/554,103	<b>Applicant(s)</b> OHTA ET AL.	
	<b>Examiner</b> HUNG S. BUI	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/21/05; 3/14/06; 6/8/06; 7/25/07</u> .                      | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in 2003-118242 on 04/23/2003.

### ***Oath/Declaration***

2. The oath/declaration filed on 10/21/2005 is acceptable.

### ***Information Disclosure Statement***

3. The IDS filed on 10/21/2005; 03/14/2006; 06/08/2006 and 07/25/2007 have been considered and made of record.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 15 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto et al. [US 7,110,262].

**Regarding claim 15**, Matsumoto et al. disclose a semiconductor memory device (10, figure 2, column 8, line 5) comprising:

- a housing (11, figure 2, column 8, line 25) having a connecting section for connection to a host device (13, figure 2, column 7, line 65);
- a plurality of compact size semiconductor memory cards (27, figure 2, column 8, line 41) housed in the housing;
- a control means (12, figure 2, column 4, lines 66-67) for controlling transmission/reception of a signal between the connecting section and the plurality of compact size semiconductor memory cards; and
- the housing is provided with a restricting mechanism (column 6, lines 19-53) for restricting removal of the compact-size semiconductor memory cards out of the housing.

**Regarding claims 22-25**, Matsumoto et al., as modified, disclose the instant claimed invention except for the specific thickness, length, width of the memory device.

The specific length, width and thickness of the semiconductor memory device would have been an obvious design consideration based on the specific type of the memory device intended to be made by the manufacture.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16, 18-19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of Oguchi et al. [US 2002/0101722].

**Regarding claim 16**, Matsumoto et al. disclose wherein the housing is formed in a substantially rectangular shape in plan view (see figure 2); the plurality of compact-size semiconductor memory cards being flatly housed in the housing (see figures 2-4); and at least two compact-size semiconductor memory cards being adjacently disposed in the memory device.

Matsumoto et al. disclose the instant claimed invention except for both end sections of the housing having a predetermined width in a shorter edge direction thereof are made thinner than an intermediate section of the housing in the same direction.

Oguchi et al. disclose a memory device (figures 1-3) having both end sections of the housing having a predetermined width in a shorter edge direction thereof are made thinner than an intermediate section of the housing in the same direction (see figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shaped edge housing design of Oguchi et al. in the housing device of Matsumoto et al., for the purpose of guiding the memory device into the host computer slot.

**Regarding claims 18-19**, Matsumoto et al., as modified, disclose the intermediate section comprising a first expanding part (an are disposed all memory cards from the left part as shown in the figure 2) and a second expanding part (a controller 12 from the right part as shown in the figure 2) respectively expanding from the both end sections in

one direction (left direction) and another direction (right direction) in a thickness direction of the housing; and the compact-size semiconductor memory cards being housed on the first expanding part size such manner that a part thereof falls on the both end sections made thinner than the intermediate section.

**Regarding claim 28**, Matsumoto et al., as modified, disclose the instant claimed invention except for the housing comprising a switch means whose operation state is operable from outside of the housing.

Oguchi et al. disclose the memory card including at least one switch (4a, figure 1, page 3, paragraphs 0037-0038) being mounted thereon the side of the memory card, for controlling operation states of the memory card.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use switch on the memory device of Matsumoto et al., as suggested by Oguchi et al., in order to disable or enable the write protection of the information memory card.

8. Claims 20-21 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of Asom et al. [US 7,170,754].

**Regarding claim 20**, Matsumoto et al., as modified, disclose the instant claimed invention except for the control means being disposed on another surface side of the circuit substrate with the compact-size semiconductor memory cards.

Asom et al. disclose a memory card (figure 8) including a circuit substrate (41, figure 8), wherein the circuit substrate has a plurality of components being mounted thereon both side surfaces of the circuit substrate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount a control means on another side surface of the circuit substrate by an opposite surface to mount a plurality of memory cards of Matsumoto et al., as modified, as suggested by Asom et al., for the purpose of providing additional space to mount the memory cards in the memory housing device.

**Regarding claim 21,** Matsumoto et al., as modified, disclose the instant claimed invention except for wherein both edge sections of the circuit substrate in one direction thereof are supported by the both end sections of the housing in the shorter edge direction.

Oguchi et al. disclose a memory device (figures 1-3) having both end sections of a housing covering a circuit substrate therein in one direction thereof being supported by the both end sections of the housing in the shorter edge direction (see figure 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shaped edge housing design of Oguchi et al. in the housing device of Matsumoto et al., as modified, for the purpose of guiding the memory device into the host computer slot.

**Regarding claims 26-27,** Matsumoto et al., in view of Oguchi et al. and Asom et al., further disclose the memory card being a SD card standard (column 4, line 42).

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al., as modified, as applied to claim 2 above, and further in view of Klatt et al. [US 6,097,605].

**Regarding claim 17**, Matsumoto et al., as modified, disclose the two compact-size semiconductor memory cards are also adjacently disposed in a longitudinal direction of the housing.

Matsumoto et al., as modified, disclose the instant claimed invention except for the housing enclosed fourth compact-size semiconductor memory cards therein.

Klatt et al. disclose a memory device (figures 2a-2b) including at least four memory cards (3, 4, figures 2a-2b) being enclosed in a housing device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have four semiconductor memory cards therein the housing of Matsumoto et al., as modified, as suggested by Klatt et al., for the purpose of providing additional data storage in the memory device.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-2800, ext. 31. The fax phone

Art Unit: 2841

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hung S. Bui/  
Primary Examiner, Art Unit 2841  
02/10/2008